

CLAIMS

WHAT IS CLAIMED IS:

1 1. A dual diversity receiver that includes first and second antennas to receive
2 first and second radio signals, wherein the first and second antennas produce first and
3 second antenna signals that are representative of the received radio signals, the receiver
4 comprising:

5 a first LNA that receives the first antenna signal and produces a first amplified
6 signal;

7 a second LNAs that receives the second antenna signal and produces a second
8 amplified signal; and

9 selection logic to determine which of the first and second amplified signals has a
10 greater received power characteristic, and to select the LNA associated with that
11 amplified signal so that its output is processed by the receiver.

1 2. The receiver of claim 1, wherein the first and second LNAs further
2 comprise first and second bias generator circuits that control the operation their
3 respective LNA based on a selection signal.

1 3. The receiver of claim 1, wherein the selection logic comprises logic to
2 measure the received power characteristic.

1 4. The receiver of claim 1, wherein the selection logic comprises logic to
2 select the alternate LNA when its received power characteristic exceeds that of the
3 selected LNA.

1 5. A method for operating a dual diversity receiver that includes two
2 antennas to receive a radio signal, wherein each antenna produces an antenna signal that
3 is representative of the radio signal, the method comprising steps of:

4 inputting the antenna signal from each antenna to a corresponding LNA that
5 produces an amplified antenna signal;

determining which amplified antenna signal has a greater received power characteristic;

activating the LNA associated with the antenna signal having the greater received power characteristic, so that the amplified antenna signal from the activated LNA is processed by the receiver; and

repeating the steps of determining and selecting.

6. The method of claim 5, further comprising using a digital filter to measure the received power characteristic.